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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,321	10/14/2003	Murthy Tata	4433-PA1	5025

7590 07/27/2004

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EXAMINER	
FITZGERALD, JOHN P	

ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/685,321	**Applicant(s)** TATA, MURTHY	
	Examiner John P Fitzgerald	**Art Unit** 2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-23_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _13-19_ is/are allowed.

6)☐ Claim(s) _1-12_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) _20-23_ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _14 October 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _10/14/03_.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

   I. Claims 1-19, drawn to an apparatus/method of measuring permeability and or permeant sorption, classified in class 73, subclass 38.

   II. Claims 20-23, drawn to humidity control device, classified in class 261, subclass 22.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because any type of humidity control device may be employed in the permeability/permeant sorption apparatus. The subcombination has separate utility such as controlling the humidity in any type of enclosure, for example, in musical instrument storage, firearms storage or for tobacco products. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Mr. Robert Parsons on 15 July 2004 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action. Claims

20-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,460,405 to Mayer et al. Mayer et al. disclose an apparatus for measuring package permeability and/or permeant sorption (Figs. 1 and 2) having: a housing (22) defining an inner sealed chamber (24), the housing being substantially impervious to a permeant of interest (supplied from source (40)); the sealed chamber having an inlet (26) for introducing an inert medium (air, nitrogen or any other gas which can purge the permeant of interest) which is substantially free of the permeant of interest into the chamber and outlet (30) for removing the inert medium from the chamber; a sensor (34) positioned adjacent to the sealed chamber, designed to provide signals, external of the chamber, indicative of a permeant concentrations within the chamber; and a sealable opening (35) in the housing in communication with the chamber for introducing, within the chamber, packages and/or film simples to be measured for permeability and/or permeant sorption. Mayer et al. disclose the claimed invention except for locating the sensor within the sealed chamber. It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the sensor within the chamber, or at any location for indicating the presence of the permeant of interest, since it has been held that rearranging parts of an invention involves only

routine skill in the art. *In re Japikse, 86 USPQ 70 (CCPA 1950).* Furthermore, the functionality of the sensor is equivalent, in either embodiment, either within or adjacent to the sealed chamber. Note: Functional recitation(s) using the words "for" have been given little patentable weight because they fail to add any structural limitations and thereby regarded as intended use language. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. *In re Finstewalder*, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) ("The manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself."); *In re Otto*, 136 USPQ 458, 459 (CCPA1963). When interpreting functional language, if the prior art is capable of performing the claimed function-even if not directly disclosed-it anticipates. *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997); *In re Sinex*, 309 F.2d 488, 135 USPQ 302 (CCPA 1962). See also MPEP § 2114, 2115.

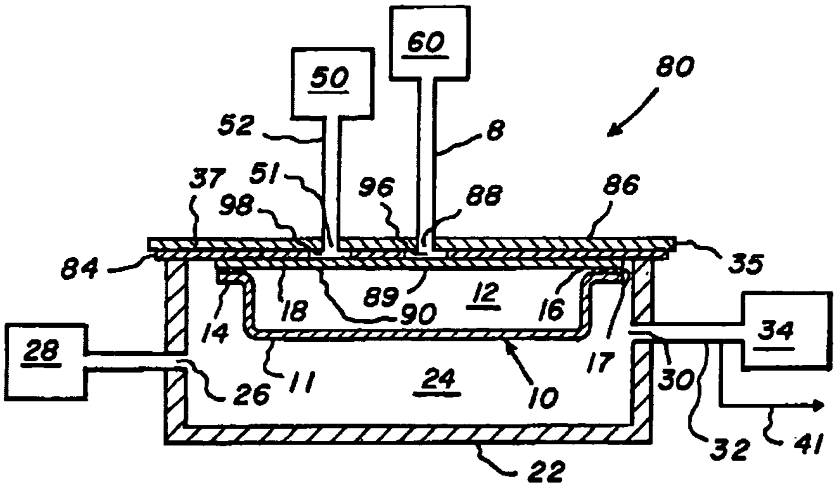

FIG. 2 Mayer et al.

6. Claims 2-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,460,405 to Mayer et al. as applied to claim 1 above, and further in view of US 4,944,180 to Tou et al. Mayer et al. disclose an apparatus for measuring package permeability and/or permeant sorption having all of the elements stated previously. Mayer et al. do not expressly disclose an apparatus or measuring package permeability and/or permeant sorption further including temperature and humidity sensors for controlling the temperature and humidity within the apparatus and the associated elements recited in claims 2-11. Tou et al. teach an environmentally controlled permeation measurement apparatus for films (Figs. 1-9) having a chamber (12) having heating/oven and cooling means (as recited in claim 5), associated temperature (124) and humidity controls (Fig. 7) (via sensors/measurement means) (as recited in claims 2, 3 and 8). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ temperature and humidity sensors/controls, as taught by Tou et al., modifying the apparatus for measuring package permeability and/or permeant sorption disclosed by Mayer et al., thus providing means for more accurately determining the shelf life of packaged foods via an apparatus that controls the temperature, pressure and humidity (Tou et al.: col. 2, lines 5-46). In specific regards to types of temperature sensor (resistance, thermistor, thermocouple (as recited in claim 4); types of heating/cooling element (thermoelectric, Peltier device) (as recited in claim 7); or types of humidity controlling apparatus (as recited in claims 9, 10 and 11), it would have been an obvious matter of design choice to substitute or employ any desired elements regarding the temperature/humidity measurement/control devices, since applicant has not disclosed that these particular elements/controls solve any stated problem or is for any particular purpose and it appears that the invention would perform equally well with any

type of measurement means or controls regarding the temperature and humidity. Furthermore, it is considered well within the purview of one of ordinary skill in the art to provide any type of temperature or humidity control, based upon the permeation characteristics and/or effects of interest.

7. Claims 2-4 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,460,405 to Mayer et al. as applied to claim 1 above, and further in view of US 5,138,871 to Retta et al. Mayer et al. disclose an apparatus for measuring package permeability and/or permeant sorption having all of the elements stated previously. Mayer et al. do not expressly disclose an apparatus or measuring package permeability and/or permeant sorption further including an agitation apparatus positioned in the chamber. Retta et al. teach a permeability measurement apparatus (Figs. 1-3) having an agitation apparatus (12 and 13) (as recited in claim 12) and a temperature controller (11) with a thermistor (10) as a temperature measurement means within a chamber (3) (as recited in claims 2-4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ an agitation apparatus and temperature control/measurement via a thermistor, as taught by Retta et al., modifying the apparatus for measuring package permeability and/or permeant sorption disclosed by Mayer et al., thus providing proper dispersion of the permeant of interest as well as maintaining accurate and narrow temperature ranges (Retta et al.: col. 9, lines 9-22).

Allowable Subject Matter

8. Claims 13-19 are allowed over the Prior Art of record.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Orr, Jr. et al., Lyssy, Akinc et al., Mayer et al., Ajot et al., Cur et al., Iwahara et al., Koiso et al., Mizobe and Sharp et al. all disclose various aspects of the instant invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fitzgerald whose telephone number is (571) 272-2843. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF
07/14/2004

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